

Department of Manufacturing System Engineering Management (MSEM) Guidelines on Preparation for Disruptions from COVID-19, March 12, 2020

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The MSEM Department must be prepared in the event that COVID-19 becomes an imminent threat to the health of students, faculty, and staff. The University will continue to monitor the situation and will notify colleges and departments when action is required. The guidelines listed below address multiple possible courses of action and how the department should respond to ensure the health and safety of students, faculty and staff, and ensure that students will continue to make progress towards completion of their courses and degree programs. The goal is to follow the campus continuity plan: <https://www.csun.edu/it/academic-continuity>

Possible Scenarios

Short-term disruption (classes canceled for week or less)

- Notify students immediately by email or through Canvas of cancellation of on-campus classes and what they should expect with regard to deliverance of course materials and evaluation.
- Post readings, assignments, and/or lecture material online, or makeup material when classes resume.
- Deliver quizzes, tests, and accept assignments online or postpone until classes resume.

Medium-term disruption (classes canceled for 2-4 weeks)

- Notify students immediately by email or through Canvas of cancellation of on-campus classes and what they should expect with regard to deliverance of course materials and evaluation.
- Post readings, assignments, and/or lecture material online.
- Post quizzes, tests, and accept assignments online. Low stakes quizzes and assignments can be dropped with greater weighting put on remaining quizzes and assignments.

Long-term disruption (classes canceled for more than a month up to end of semester)

- Notify students immediately by email or through Canvas of cancellation of on-campus classes and what they should expect with regard to deliverance of course materials and evaluation.
- Post readings, assignments, and/or lecture material online.
- Deliver quizzes, tests, and accept assignment submissions online.
- Disruptions affecting final exams need to follow the CECS Academic Continuity Plan and MSEM guidelines (see plan at the end of this document).

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- Despite long-term disruption, the course must continue to offer instruction in a manner that students can meet the learning outcomes described in the course syllabus. Courses must continue to meet expectations of subsequent courses, degree requirements, and subsequent degree programs and professional schools.

Recommendations for Preparing for Cancellation/Closure and Implementing Alternate Formats

Faculty should be prepared on short notice to operate remotely in the extreme event that the campus is closed to all but essential personnel. Such preparation should include:

1. Taking your laptop/iPad home with you every night unless you have a computer at home.
2. Having a copy of all course material backed up on a cloud service (e.g., Box, iCloud, DropBox, GoogleDrive, etc.).

Switching to online formats in short notice will be challenging depending on the type of course. The following are specific recommendations for lecture, labs, and team projects.

Lectures

1. **Canvas.** Canvas is the most convenient and accessible means of delivering online instruction and evaluation for lecture course material at CSUN. Lectures can be posted in PDF, PPT, Keynote, or other formats. If using Keynote or PPT, you can annotate your lectures with audio recordings. Quizzes, tests, assignments can also be distributed and submitted online via Canvas.
2. **Zoom.** You can deliver lectures via Zoom Video Conference and present your lectures as you would in class and also interact with students via audio or chat. See <https://www.csun.edu/it/zoom> for more information on Zoom. As soon as possible and before the situation requires it, conduct a trial Zoom lecture with your students so that everyone is comfortable. Note that Zoom is compatible with nearly any devices that your students have with them.
3. **Lecture Capture.** If you have used lecture capture in your course within the last year, download your lectures. You can store them in CSUN Box and send links to the videos directly to your students via email or post links in Canvas. If you have not used Lecture Capture, then perhaps another instructor who has taught the course with Lecture Capture may be willing to download and share their videos. The department can assist you in identifying others who may have suitable lecture captures.
4. **Record and post lectures.** CSUN has a license to [Camtasia](#) software for capturing and editing presentations. Lectures can be posted in YouTube or in CSUN Box.
5. **CSUN Box.** Videos, lecture material, assignments, syllabi can be posted in Box and shared with your students. You might consider creating a folder that will contain all of the materials you use in your course in the event you need access from home, or you need to share the material with a colleague in the event you are incapacitated.

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6. **Email.** Materials may be delivered and submitted by email but may not be feasible for large classes.

Labs

It may not be possible to deliver the same learning experience online as we would expect in the hands-on learning environment in our labs, especially in regard to wet labs. However, we must still provide instruction that permits students to meet the learning outcomes for our courses and programs. Here are some suggestions:

1. **Pre-packaged online labs.** There may be online labs for certain classes that may be available commercially or open source like YouTube.
It is recommended that faculty explore some of these options now in the event that online labs are required.
2. **Data recycling.** Distribute instructions and real data from previous semesters, or use data that were published online.
3. **Video demonstration.** If campus is open but classes are closed, labs may be demonstrated by an instructor and streamed (via Zoom) or video recorded and distributed via Canvas, Box, or YouTube. There may be demonstrations already posted online on YouTube or other video services.
4. **Textbook publisher digital content.** If you require a textbook in your class, you may already have access to interactive exercises and lessons that may cover the learning objectives of your lab. Consult with your publisher representative on what may be available. The department can assist in connecting you with that person if you do not have contact information.
5. **Primary literature.** Have students read and comprehend primary literature that incorporates techniques and concepts used in labs.

Senior design and other team projects

It is okay for students to work in small groups, say 3 – 4, on a specific portion of the project in the labs. However, large team meetings and group work consisting of a larger number of students should be avoided. If it is not possible to assemble the complete project without a large group of students working simultaneously, then the project grade may be based on the contributions of each specific sub-team. Students who do not feel comfortable coming to campus should not be penalized – consider assigning alternate tasks to those students.

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Academic Continuity Plan, College: Engineering and Computer Science

California State University, Northridge
Academic Affairs

Academic Continuity Plan

COLLEGE CRITICAL FUNCTION NARRATIVE FORM

Date: October 23, 2019

College: Engineering and Computer Science

Critical Function: CLASSROOM INSTRUCTION AND FINAL EXAMS

Planning Responsibility: Robert Ryan, Special Assistant to the Dean

Vulnerability: Loss of instructional faculty member due to illness or death

Planned Response

i. How will instruction continue? // iv. What is the plan if a faculty member is not available to teach their classes?

The Department has the primary responsibility for this contingency. If the absence is short term (< 2 or 3 weeks), the Department Chair will attempt to make temporary arrangements with a substitute (either the Chair or a willing F/T faculty member). If it is a longer term situation, the Chair will arrange to hire a substitute from their P/T faculty pool, in consultation with the DFO and Dean.

How will this be communicated to students, faculty, and staff? What different means of communication will be used?

The Department Chair (or substitute instructor, if applicable) will update the students verbally in the classroom. Posting in CANVAS and Emails to students' @my.csun.edu addresses will be used to supplement the communication in the classroom. Email will also be used to notify affected staff, faculty, and administrators.

Vulnerability: Loss of access to campus for final exam week due to terror threat

Planned Response

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- i. *How will instruction continue? How will this be communicated to students, faculty, and staff? What different means of communication will be used?*

In the event of an emergency such as a health concerns or terror threat that would require cancellation and rescheduling of examinations, it is anticipated that there will likely be a bulk arrangement that will work for the majority of the students affected. The remaining fraction will have to be accommodated on a more individualized basis. The following are options for accommodating rescheduling of examination sessions in response to emergencies that may arise. Certain faculty in CECS have restructured their courses so that there is no final examination and instead multiple exams are administered throughout the semester. The scheduled final exam time is used for reports, presentations, and other non-test activities that are already integrated into the course, and can be easily moved online or moved to an alternative date.

Instructors that do require an in-person final examination will reschedule the final exam off campus using public facilities such as local libraries, high schools, conference rooms, etc. This becomes a “field trip” and students must sign a release form to release liability on the university to participate. Faculty in conjunction with the university staff will be responsible for making the arrangements for the offsite examinations.

Instructors that are able to provide online exams will use the campus LMS Canvas to make the final examination available electronically. This can be as simple as using a PDF version of the paper test which the students download, work on and submit their results using quiz question fields or upload a scanned version of their completed assignment.

If a campus closure during final exam week is announced by University Administration, an email to all CECS faculty and staff will be sent by the Dean’s Office to remind faculty of the options described above. Email will be the primary mode of communication to make arrangements for the alternative exams, and to keep students informed of these arrangements.

Vulnerability: Significant Natural Disaster (e.g. earthquake)

Planned response

It is assumed that general information about the status of the campus would be available to administrators, faculty, students, and staff via text and cell phone messages, as well as to the general public from updates to the campus web-site. This would include details related to the physical security of the campus. If the campus is determined to be safe, secure, and open, then the following steps would be taken.

- i. *How will instruction continue? How will this be communicated to students, faculty, and staff? What different means of communication will be used?*

The Dean’s Office would be responsible for coordinating communications to College faculty, staff, and students, with the assistance of the College staff in Information Systems. The primary communication mode to students would be email via their CSUN addresses. If the campus is secure and its physical spaces are available, then courses would continue as usual. Departments would be responsible for making special arrangements if a faculty member is unable to travel to campus due to personal circumstances related to the disaster.

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- ii. *What if classroom physical space is not available? Are faculty trained to teach online if necessary?*

Most College faculty use Canvas for distributing materials related to instruction in lecture courses, such as assignment descriptions, course syllabus, etc. In some cases PowerPoint versions of lectures and additional resources may be available on Canvas. Consequently, for lecture courses, the Canvas course site, supplemented with emails from the professor as necessary, should be sufficient for continuation of instruction. If the physical space is unavailable for an extended period of time, alternative arrangements would have to be made for exams, and possibly for some minimal amount of face to face lecture time.

Laboratory courses present significant challenges if their physical space is not available. Assignments in some lab courses (e.g. computer science labs, computer-based engineering labs) could possibly still be done with student laptops or desktops. Laboratory courses which require specialized equipment may not be able to continue until the space becomes available again.

- iii. *What if an alternate location is required for classes? How will this be communicated to students, faculty, and staff? Are there specialized equipment needs to plan for?*

For lecture courses, identifying alternate locations should not be too difficult, depending on the scope of the disaster. Communication of details to students, faculty, and staff would be sent via CSUN email/posting on CANVAS. The challenge of keeping laboratory courses operational has been noted in the previous paragraph. Department Chairs and relevant faculty would have to make a determination for each laboratory course.

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*Department of Manufacturing System Engineering Management (MSEM)
Guidelines, Academic Continuity Plan B for Final examination*

In the event of an emergency closure of the campus (as deemed necessary by the Administration) during finals week, there are several options that faculty members within the College are required to select from and indicate in their course syllabus. These are:

- (1) Structure the course such that it has no scheduled final exam and the semester grade would be based entirely or partly upon multiple exams throughout the semester and a culminating experience before finals week;
- (2) State that in the case an emergency is declared, one or more specific contingencies will be implemented from the following. (Faculty must be aware that if more than one contingency is stated, each student would have the choice of the one applied.)
 - a) The final exam would be offered in an alternative format, e.g. online or take home, such that students would not be required to come to campus during closure;
 - b) The semester grade will be calculated based upon scores earned prior to the final exam;
 - c) The final exam would be offered on the originally scheduled date but at an offsite location prearranged by the Department Chair.
 - d) The final exam would be rescheduled (under a title other than “Final Exam” such as “Alternative Exam” or “Follow-up Exam”) after the emergency closure but before grades are due.

Only in rare cases when a suitable accommodation cannot be found from the above list should the student be given an incomplete. Other accommodations may be made but must be approved by the Department Chair in advance and also indicated in the syllabus.